

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

Claims 1-8 (cancelled)

9. (currently amended): An optical deflection element comprising:

photonic crystal having a refractive index which changes periodically depending on a location of within said photonic crystal; wherein:

said optical deflecting element has a first end face and a second end face; and

a shape of the second end face of said optical deflection element is determined in such a manner that a plurality of light beams incident upon the first end face at the same incidence angle and having different wavelengths are emitted from the second end face in different directions corresponding to the wavelengths.

10. (original): An optical deflection element according to claim 9, wherein propagation directions of the plurality of light beams incident upon the first end face are separated from each other in correspondence with the wavelengths, whereas the separated light beams are emitted from the second end face in different directions.

11. (original): An optical deflection element according to claim 9, wherein said photonic crystal includes optical crystal in which a plurality of circular holes are formed in a silicon substrate in a periodic arrangement.

12.-15 (cancelled)

16. (currently amended): An optical deflection element comprising:

a first normal optical medium;

a second normal optical medium; and

photonic crystal provided between said first and second normal optical media and having a refractive index which changes depending on a location of within said photonic crystal; wherein:

said optical deflecting element has a first boundary surface between said first normal optical medium and said photonic crystal and a second boundary surface between said second normal optical medium and said photonic crystal; and

a shape of the second boundary surface of said optical deflecting element is determined in such a manner that a plurality of light beams incident upon the first boundary surface at the same incidence angle and having different wavelengths are emitted from the second boundary surface in different directions corresponding to the wavelengths.

17. (original): An optical deflection element according to claim 16, wherein propagation directions of the plurality of light beams incident upon the first boundary surface are separated from each other in correspondence with the wavelengths, whereas the separated light beams are emitted from the said second boundary surface in different directions.

18. (original): An optical deflection element according to claim 16, wherein said photonic crystal includes optical crystal in which a plurality of circular holes are formed in a silicon substrate in a periodic arrangement.

19. (original): An optical deflection element according to claim 16, wherein a material of said first and second normal optical media is the same as one of materials which constitute said photonic crystal.

Claims 20-28 (cancelled)

29. (New): An optical deflection element according to claim 9, wherein said second end face has plural angles with respect to said first end face so as to change propagation directions of the plurality of light beams in correspondence with the wavelengths thereof.

30. (New): An optical deflection element according to claim 9, wherein an angle defined between a tangential direction on said first end face and a tangential direction on said second end face at an arrival point of each of plural propagation light beams is different for light beams having different wavelengths.

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31. (New): An optical deflection element according to claim 16, wherein said second boundary face has plural angles with respect to said first boundary face so as to change propagation directions of the plurality of light beams in correspondence with the wavelengths thereof.

32. (New): An optical deflection element according to claim 16, wherein an angle defined between a tangential direction on said first boundary face and a tangential direction on said second boundary face at an arrival point of each of plural propagation light beams is different for light beams having different wavelengths.